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Notice of Allowability	Application No.	Applicant(s)	
	10/075,054	YOUSEF, NABIL R.	
	Examiner	Art Unit	
	Erin M. File	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2/21/2006.
2. ☒ The allowed claim(s) is/are 1,4-8,10-17,19-24,26-36,38-51,53-64,66-69, renumbered as Claims 1-61.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>02252006</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____. | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

JEAN B. CORRIELUS
JEAN B. CORRIELUS
PRIMARY EXAMINER
 3-30-06

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Kevin Smith on March 27, 2006.

2. The application has been amended as follows:

1. (Amended) A communication receiver that is operable to receive a signal that is transmitted via communication channel, the received signal comprising a training sequence portion and a data portion, the communication receiver comprising:

a channel estimation block that is operable to estimate a characteristic of a communication channel; and

a channel equalizer block that is operable to calculate a plurality of channel equalizer tap coefficients, the plurality of channel equalizer tap coefficients being used to equalize for any communication channel-induced changes within the received signal; and

wherein ~~at least one of~~ the channel estimation block and the channel equalizer block performs repeated adaptation;

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the channel estimation block being operable to employ repeated adaptation on the training sequence portion and the data portion, the repeated adaptation of the channel estimation block being performed using a plurality of channel estimation cycles; and

the channel equalizer block being operable to employ repeated adaptation on the training sequence and the data portion, wherein the channel equalizer block calculates the plurality of equalizer tap coefficients by performing repeated adaptation on the training sequence portion and the data portion using the plurality of channel equalizer cycles; and

wherein the plurality of channel estimation cycles includes a plurality of regions; and wherein the channel estimation block performs region-dependent error handling using repeated adaptation on the training sequence portion and the data portion.

Claim 9 has been cancelled.

Claim 10, line 1, "9" has been changed to --1--.

3. The following is an examiner's statement of reasons for allowance:

The limitation of a plurality of channel estimation cycles includes a plurality of regions; and wherein the channel estimation block performs region-dependent error handling using repeated adaptation on a training sequence portion and a data portion

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found in original independent claims 1, 17, 34, 45, and 60 is not found in the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erin M. File whose telephone number is (571)272-6040. The examiner can normally be reached on M-F 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Erin M. File

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A handwritten signature, possibly "J.B. Corrielus", written in black ink over a horizontal line.

3/24/2006


JEAN B. CORRIELUS
PRIMARY EXAMINER

3.30.06